Bruhat Bengaluru
Mahanagara Palike

WORK SLIP

BRUHATH BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

WORK SLIP

NAME OF WORK:- Modified Estimate For Additional and Alteration of school Buildings at Kanakanagara,Allalsandra and Ambedkar Nagara in Ward No-04.

Estimated Cost RS:-100.00 Lakh.s

Agency:-M/S Goutham Construction Prop.Sri.RAGHUNATHA B P

Approved Tender Amount RS:- 9174796.98 (Excluding GST 12%)

Tender Premium:- 4.90% Above

Modified Est S.No.s	Tender Item S.No.s	Description of Work	Unit	Qty as per Sanctioned Estimate			Qty as per Tender			Total Qty Executed	Qty. as per Actuals upto 125%			Qty. as per Actuals above 125%			Total Amount	Excess	Savings	Remarks
				Qty	Rates	Amount	Qty	Rates	Amount		Qty.	Rates	Amount	Qty.	Rates	Amount				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	1	KSRRB M200.12.3.Dismantling of existing structures like culverts,bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherevernecessary, sorting the dismantled material, disposal of unserviceablematerial and stacking the serviceable material with all lifts complete asper specifications.C.Prestressed/Reinforced Cement Concrete Grade M-20 & above.Morth Specification No, 202.1(Page No 139,Item No 18.19)	Cum	65.80	1716.12	112920.70	65.80	1800.21	118453.82	65.80	65.80	1800.21	118450.53				118450.53		3.29	Item operated
2	2	KSRRB M200.14.2.Dismantling of existing structures like culverts,bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherevernecessary, sorting the dismantled material, disposal of unserviceablematerial and stacking the serviceable material with all lifts complete asper specifications Dismantling brick/Tile work B. la cement mortar. Pg No.139 Item No.18.23	Cum	81.98	379.08	31076.98	81.95	397.65	32599.53	81.95	81.95	397.65	32599.94				32599.94	0.60		Item operated
3	3	37.51: Dismantling cement concrete flooring or plain cement concrete work including removing and conveying the debris to distance upto 200m (within average thickness of 15 cms) No. KBS Pg No 270 ,Item No 37.51.	Sqm	264.68	92.83	24503.48	264.68	97.43	25787.77	264.68	264.68	97.43	25788.02				25788.02	0.24		Item operated
4	4	Dismantling plastering and removing the debris with a lead upto 200m. (P.No.270, I.No. 37.50)	Sqm	451.79	39.96	18053.53	451.79	41.92	18939.04	451.79	451.79	41.92	18939.04				18939.04			Item operated
5	5	Conveying the excavated earth, debries etc., with all lead and lifts including loading and unloading charges etc., complete as per the direction of the Engineer in-charge. Pg No 136,Item No17.4	Cum	196.52 57.60	67.09 67.09	13184.53 3864.38	254.12	70.38	17884.97	269.79	269.79	70.38	18987.90				18987.90	1102.94		Item operated
6	6	KSRB 2.2.2 Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications. Specification No. KBS 2.1(b) / 2.3.5 Pg No 6,Item No 2.4	Cum	227.25	434.92	110199.07	227.25	508.68	115597.53	244.24	244.24	508.68	124242.29				124242.29	8644.76		Item operated
7	7	KSRB 2.8 : Providing and Filling in foundation with granite / trap broken metal 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift complete as per specifications. Specification No. KBSPg No 7, Item No 2.15	Cum	17.54	2623.32	46013.03	17.54	2751.86	48267.62	19.98	19.98	2751.86	54966.29				54966.29	6715.67		Item operated

8	8	KSRB 4-1.6 : Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240 kg/s, with 20mm and down size graded granite metal course aggregates @0.69cum and fine aggregtes @ 0.45cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation Plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specifiation No. KBS 4.1, 4.2Pg No.15 Item No 4.6 of PWD SR 2018-19)	Cum	45.05	6395.29	288017.31	45.05	6706.56	302130.53	46.92	46.92	6706.56	314661.74			314661.74	12531.21		Item operated
9	9	KSRB 4-1.5 : Providing and laying in position plain cement concrete of mix M20 with OPC cement @ 300kgs, with 20mm and down size graded granite metal course aggregates @0.69cum and fine aggregtes @ 0.45cum, with superplastiniser @.5lts confirming to IS9103-1999 Reaffirmed 2008, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.15, I.No.4.5 of PWD SR 2018-19)	Cum	77.99	6426.15	501175.44	77.99	6741.03	525732.93	28.80	28.80	6741.03	194134.08			194134.08		331598.85	Item operated
10	10	KSRB 5.2-3 : Providing and constructing granite / trap / basalt size stone masonry in foundation cement mortar 1:6, stone hammerdressed in courses not less than 20 cms high, bond stones at 2m apart in each course including cost of materials, labour, curing completeas perspecifications.KBS 5.1.13 Pg No 25 item No 5.6	Cum	49.11	4963.68	243766.32	49.11	5206.90	255710.56	59.75	59.75	5206.90	311103.81			311103.81	55392.95		Item Operated
11	11	KSRB 2.3 : Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms. in depth, compacting each deposited layer by ramming after watering with lead upto 50 m. and lift upto 1.5 m. including cost of all labour complete asper specifications. Specification. No. KBS 2.9, Pg No.7, Item No.2.10	Cum	169.65	217.08	36827.62	169.65	223.72	37632.70	170.97	170.97	223.72	38233.55			38233.55		-300.85	Item operated
12	12	KSRB 4-6.1 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2, Pg No16, Item No 4.28	Sqm	132.55	278.64	36933.73	132.55	292.29	38743.04	131.40	131.40	292.29	38406.91			38406.91		336.13	Item operated
13	13	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness , including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2, Pg No 16, Item No 4.31	Sqm	114.18	386.64	44146.56	114.18	405.59	46310.27	94.73	94.73	405.59	38419.51			38419.51		7890.75	Item operated
14	14	KSRB 4-6.5 : Providing and removing centering, shuttering, strutting, propping etc. and Removal of form Work for columns, pillars, piers, post and struts, square / rectangular / polygon in plan including cost of all materials, labour complete as per specification. Specification No.KBS 4.6.2, Pg No 16, Item No 4.32	Sqm	195.79	492.41	96417.33	195.79	516.61	101141.91	195.99	195.99	516.61	101203.90			101203.90	61.99		Item operated
15	15	KSRB 4-6.2 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for suspended floors, landings, balconies and likes, thickness upto 200 mm including cost of all materials, labour complete as per specifications for heights more than 3.50m from ground level. - 0 to 5 mtrs.Specification No. KBS 4.6.2 page no.16 item no 4.29.2	Sqm	318.15	432.00	137440.80	318.15	453.17	144136.04	316.44	316.44	453.17	143402.25			143402.25		773.79	Item operated

16	16	KSRB 4-6.9 Providing and removing centering, shuttering, strutting, propping etc., for edges of slabs and breaks in floors including cost of all materials,labour complete as per specifications. Specifications No. KBS 4.6.2, Pg No 17,Item No 4.36	Sqm	24.17	815.43	19708.22	24.17	835.35	20673.81	27.51	27.51	835.35	23531.00				23531.00	2857.19		Item operated
17	17	KSRB 4-6.7 Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for sides and soffits of beams, beam haunchings, cantilever girders, bressumers and lintels not exceeding 1m in depth including cost of all materials, labour complete as per specifications.Specification No. KBS 4.6.2, Pg No 17, Item No 4.34	Sqm	271.47	315.36	85610.75	271.47	330.81	89804.99	243.44	243.44	330.81	80532.39				80532.39		9272.60	Item operated
18	18	KSRB 4-6.11 Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for Stairs (excluding landing) except spiral staircase including cost of all materials, labour complete as per specification. Specification No. KBS 4.6.2, Pg No 17, Item No 4.38	Sqm	46.28	563.60	26090.55	46.28	589.12	27264.47	37.94	37.94	589.12	22351.21				22351.21		4913.26	Item Operated
19	19	KSRB 4-6.13 Providing and removing centering, shuttering, strutting, propping etc., for chajjas, corbels etc. , including edges including cost of all materials, labour complete as per specification. Specification No. KBS 4.6.2 Pg No 17,Item No 4.37	Sqm	21.06	343.54	7346.57	21.06	365.93	7706.49	10.04	10.04	365.93	3672.18				3672.11		4034.38	Item operated
20	20	KSRB 4.2.1 : Providing and laying in position reinforced cement concrete of Design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70 cum and fine aggregate @ 0.47cum, with super plasticizers @ 3 liters confirming to to 9105-1999 reaffirmed-2008 at machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedestals, retaining walls, return walls, walls (any thickness) including attached pilasters, columns,pillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6, Pg No. 14, Item No. 4.10	Cum	101.82	7035.46	716656.00	101.82	7353.34	748771.68	88.56	88.56	7353.34	656054.00				656054.00		92687.68	Item operated
21	21	KSRB 4.2.5 : Providing and laying in position reinforced cementconcrete of design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum andfine aggregate @ 0.47cum,with superplasticiser @3ltrs confirming to IS 9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick,vibrated fo all works in ground Floor level for roof slabs ,staircase, lintels , beams, retaining walls ,return wall, walls (as thick ness) including attached pilasters ,columns, pillars,posts,struts,buttress,string or lacing courses ,parapets,coping,bed blocks,anchor blocks ,plain window cills,fillets including cost of all materials, labour,HOM of machinery, curing, complete as per specifications. No. KBS 4.1, 4.6, Pg No. 14, Item No. 4.12	Cum	4.24	7290.10	30910.02	4.24	7647.31	32424.59	7.45	7.45	7647.31	57005.00				57005.00	24578.41		Item operated

22	22	KSRB 4.2.8 : Providing and laying in position reinforced cementconcrete of design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.78cum andfine aggregates @ 0.47cum,with superplastisizer @3lts confirming to IS 9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick,vibrated fo all works in ground Floor level for roof slabs ,staircase, lintels , beams, retaining walls ,return wall, walls (in thrck nes) including attached plasters ,columns, pillars,posts,struts,butters,string or lacing courses ,parapets,coping,bol blocks,anchor blocks ,plain window cills,fillets including cost of all materials, labour,HOM of machinery, curing, complete as per specifications. No. KBS 4.1, 4.6, Pg No. 14, Item No. 4.12	Cum	9.26	7354.90	68106.37	9.26	7715.29	71485.59	10.44	11.58	7785.29	89304.00	4.86	7715.29	37506.00	126810.00	55366.41		Item operated
23	23	Providing and laying cement concrete using 20 mm and down size granite coarse aggregates and fine aggregates of ready mixed concrete (RMC) for R.C.C works laid in 15 cms thick layers and well compacted including vibrating, curing, etc for all super Structure works with all lead and Lift etc., complete (exclusive of cost of steel and fabrication charges) Ready mixed cement for concrete with M-25. Pg No.19 Item No.4.49.2	Cum	77.59	6698.26	519717.99	77.59	7026.47	545183.81	79.11	79.11	7026.47	555845.07				555845.07	10661.26		Item operated
24	25	KSRB 4.2.11 : Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 27.20kgs, with 12mm and down size graded granite metal coarse aggregates @0.58Mcum and fine aggregates @ 0.39Icum, with superplastisizer @0.225lts, machine mixed, well compacted for plain chgia of 5.5 cms. average thickness, upto First Floor level, including cost of all materials, labour, HOM of machinery, finishing, curing, complete as per specifications. Specification No. KBS 4.1, 4.6 Pg No.15 Item no.4.20	Sqm	6.30	541.08	3408.80	6.30	567.59	3575.82	10.04	7.88	567.59	4470.00	2.16	567.59	1226.00	5696.00	2120.18		Item operated
25	26	KSRB 4.9.2 : Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.Specification No. KBS 4.6.3 Pg No.18 Item No.4.46.2	Tonne	21.68	94410.43	2046817.47	21.68	99036.47	2147310.67	20.35	20.35	99036.47	2015367.00				2015367.00		131743.67	Item operated
26	27	KSRB 4.9.2 : Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.Specification No. KBS 4.6.3 Pg No.18 Item No.4.46.2	Tonne	4.66	95281.20	443716.81	4.66	99683.89	465458.93	9.29	5.83	99683.89	581824.00	3.47	99683.89		581824.00	116365.07		Item operated
27	28	KSRB 5.14.1: Providing and constructing load bearing wall with solid concrete blocks of size 400X200X200mm having block density not less than 1800kg/m3 having a minimum average compressive strength 5.0N/mm2 confirming to IS 2185 (part 1) :2005 and constructed with cement mortar 1:4,as per IS 2572:2005 including cost of materials, labour charges, scaffolding, curing, hire charges of machineries etc., complete as per specifications. KBS No.5.4, Pg No. 27 Item No. 5.27.1	Sqm	266.31	914.96	262373.64	266.31	1033.22	275229.14	114.45	114.45	1033.22	118255.00				118255.00		156974.14	Item operated

28	29	KSRB 5-14.1: Providing and constructing load bearing wall with solid concrete blocks of size 400X200X200mm having block density not less than 1800kg/m3 having a minimum average compressive strength 5.00N/mm2 confirming to IS 2185 (part 1) :2005 and constructed with cement mortar 1:4,as per IS 2572:2005 including cost of materials, labour charges, scaffolding, curing, hire charges of machinaries etc., complete as per specifications. KBS No.5.4, Pg No. 27 Item No. 5.27.1	Sqm	131.77	1049.76	138.27	131.77	1101.20	145105.12	140.85	140.85	1101.20	155107.00				155107.00	10001.88		Item operated
30	31	KSRB15-3.8 : Providing 15mm thick cement plaster in single coat with cement mortar 1:4, to brick masonry including rounding off corners, wherever required smooth rendering, Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications Pg No. 116,Item No.15.16	Sqm	294.77	251.53	83889.37	294.77	295.69	87160.54	199.75	199.75	295.69	59063.00				59063.00		28097.54	Item operated
31	32	KSRB15-3.5 : Providing 10mm thick cement plaster in single coat with cement mortar 1:4, to brick masonry including rounding off corners, wherever required smooth rendering, Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications Pg No. 116,Item No.15.16	Sqm	256.51	294.54	84563.06	256.51	309.29	88707.46	633.05	355.51	309.29	110054.90	274.53	302.49	83045.00	193927.00	105219.54		Item operated
32	33	KSRB 15.3.2 : Providing 12mm thick cement plaster in single coat with cement mortar 1:4 , to brick masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications .Pg No. 115 Item No.15.10	Sqm	411.41	229.32	99641.55	411.41	231.12	95085.08	344.52	344.52	231.12	79625.46				79625.46		15459.62	Item operated
33	34	KSRB 15.3.2 : Providing 12mm thick cement plaster in single coat with cement mortar 1:4 , to brick masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications .Pg No. 115 Item No.15.10	Sqm	194.04	226.80	44009.27	194.04	237.91	46164.06	219.47	242.55	237.91	57705.00	55.92	237.91	13304.00	71009.00	24844.94		Item operated
34	36	KSRB 15.5.1 : Providing Rough cement plastering 15mm thick in single coat with cement mortar 1:4 to brick masonry for base of dadoing works with sand of approved quality ,providing and removing scaffolding ,including cost of materials ,labour,curing complete as per specifications.Page No-117,Item No-15.30	Sqm	32.97	221.40	7299.56	32.97	232.25	7657.28	5.96	5.96	232.25	1384.21				1384.21		6273.07	Item operated
35	37	KSRB15-3-14 : Providing 12mm thick cement plaster in single coat with cement mortar 1:4 , to ceiling including rounding off corners wherever required smooth rendering, ; including Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. Pg No 116, Item No15.22	Sqm	262.88	243.00	63879.84	262.88	254.91	67018.74	337.18	242.55	254.91	61825.00	94.63	254.91	24122.00	85950.00	18939.26		Item operated
36	38	Providing applying two coats of wall putty to inside plastered walls and ceiling using white cement putty . Scrapping and levelling the surface using steel blade and preparing the surface even and smooth by using different grade sand papers, including cost of all material cost of labour and scaffolding etc. ,complete as per specification. Pg No.120 Item No.15.106	Sqm	968.60	84.24	81594.86	968.60	88.37	85595.18	350.43	350.48	88.37	30971.92				30971.92		54623.26	Item operated

37	39	KSRB 15-15.1 : Providing and applying painting in two coats with plastic emulsion paint of approved brand on wall surface to give an even approved shade after thoroughly brushing the surface, free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour, complete as per specifications. - with primer. PgNo. 119, I.No. 15.51.2	Sqm	705.71	93.20	65795.01	705.71	101.96	71954.19	635.65	635.65	101.96	64810.87				64810.87		7143.32	Item operated
38	40	KSRB 15-14.1 : Providing and applying two coats with oil bound washable distemper of approved brand and shade on wall surface including priming coat with distemper primer after throughly brooming the surface free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour, complete as per specifications page no117 item no 15.49.1 . KSRB 15-14.1 : Extra over Item 15-14.1 for applying oil bound washable distemper on ceiling and / or sloping roof as per specifications.Pg No 119,Item No15.49.2	Sqm	262.88	127.44	33501.43	262.88	133.68	35148.80	332.18	242.55	133.68	32424.90	94.63	133.68	12658.00	45075.00	9933.20		Item operated
39	41	KSRB 15-16.1 : Providing and finishing external walls in two coats with waterproof cement paint of approved brand and shade to give an even shade after throughly brooming the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter cost of materials, labour, complete as per specifications. - with primer. (P. No. 120, I.No. 15.53.2 of SR 2018-19).	Sqm	294.77	110.16	32471.86	294.77	115.56	34063.62	199.75	199.75	115.56	23082.82				23082.82		10980.80	Item operated
40	42	KSRB 15-16.1 : Providing and finishing external walls in two coats with waterproof cement paint of approved brand and shade to give an even shade after throughly brooming the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter cost of materials, labour, complete as per specifications. - with primer. (P. No. 120, I.No. 15.53.2 of SR 2018-19).	Sqm	256.51	118.80	34073.05	256.51	124.62	35742.26	633.05	358.51	124.62	44678.00	274.53	124.62	34213.00	78891.00	43148.74		Item operated
41	43	KSRB 14.9-1: Providing and laying M-15 cement concrete flooring, 50 mm thick with metallic concrete hardner topping , under layer of 35mm thick m-15 cement concrete using broken granite metal of 20mm and down size, and top layer 50mm thick of metallic cement hardner consisting of mix 1:2 (1 cement hardner mix : 2 granite metal 10mm nominal size	Sqm	149.50	681.43	101881.26	149.50	714.87	106873.07	145.31	145.31	714.87	102445.02				102445.02		4425.05	Item operated
42	44	KSRB 14.9-1: Providing and laying M-15 cement concrete flooring, 50 mm thick with metallic concrete hardner topping , under layer of 35mm thick m-15 cement concrete using broken granite metal of 20mm and down size, and top layer 50mm thick of metallic cement hardner consisting of mix 1:2 (1 cement hardner mix : 2 granite metal 10mm nominal size) by volume, with which metallic hardening compound of approved quality mix in the ratio of 4:1 (4 part of cement and 1 part of metallic floor hardening compound of approved quality by wt) , including finishing cost of materials, labour, curing, complete as per specifications Specification No. RBS 14.4, Pg No 104,Item No 14.13	Sqm	82.50	693.64	57230.30	82.50	717.14	59164.05	194.76	103.83	717.14	73955.00	91.64	717.14	65715.00	139670.00	80505.95		Item operated
43	45	Providing and fixing Vitrified glazed tiles of approved make,quality & colour of size 600 x 600 x 10 mm thick fixed on bed of 12mm thickcement mortar for flooring, skirting and jointed with neat cement slurrymixed with pigment to match shade of tiles, including providing spacersat required interval and removing stains, including cost of all materials,mortar, labour, etc., Complete as per specification. Page No 109 Item No 14.45.1	Sqm	29.06	1054.08	30631.56	29.06	1105.73	32132.51	114.67	36.53	1105.73	40406.00	78.35	1105.73	86625.00	126794.00	94661.49		Item operated

44	46	Providing and fixing Vitrified glazed tiles of approved make,quality & colour of size 600 x 600 x 10 mm thick fixed on bed of 12mm thickcement mortar for flooring, skirting and jointed with neat cement slurrymixed with pigment to match shade of tiles, including providing spacersat required interval and removing stains, including cost of all materials,mortar, labour, etc., Complete as per specification. Page No 109 Item No 14.45.1	Sqm	91.59	1056.24	96741.02	91.59	1108.00	101451.72	205.83	184.49	1108.00	126852.00	91.34	1108.00	101207.00	228059.00	126577.28		Item operated
45	47	KSRB 14-14.5 : Providing Ceramic tiles of approved make,shade and size for flooring ,treads of steps and landings laid on a bed of 12mm thick,cement mortar 1:3 mix,flush pointing with white cement using Colour pigment including cost of materials,labour,curing ,complete as per specifications.for ceramic tiles of size 30 X 30cms 6mm thick	Sqm	9.12	1306.80	11918.02	9.12	1370.83	12501.97	1.80	1.80	1370.83	2467.49				2467.49		10034.48	Item operated
46	48	KSRB 14-17.2 : Providing skirting, dado, risers of steps with colour glazed tiles 300x60 cms 6mm thick with border of size 30 x 10 cms on 10mm thick cement plaster 1:3 and jointed with white cement slurry over rough plaster surface (excluding cost of rough plastered surface which should be measured and paid separately) using glazed tiles of approved make and size including cost of materials, labour, complete as per specifications. Specification No.KBS 14.16, 14.17 PgNo 108,Item No.14.41.2	Sqm	36.12	1762.56	63663.67	36.12	1848.93	66793.35	9.76	9.76	1848.93	18045.56				18045.56		48757.79	Item operated
47	49	Waterproofing of RCC Terrace / podium slab / toilet / utilities / water retaining structure by preparing the surface by chipping and cleaning and Grouting of Honey comb, voids,cracks / construction joints with cement slurry (1kg cement added in 10 ltr of water) added with 100gm of inorganic accelerator, followed by spraying of liquid biological modified alkaline earth silicates @ 0.40 ltr per sqm on whole surface to reduce the micro porosity and allowing it to dry, curing the surface for the silicates to penetrate deeper into the concrete and spraying waterproofing impregnate liquid containing silane and silanol linear copolymer @ 0.50 ltr per sqm and finally applying polymer slurry made out of cross linked acrylic / styrene / butadiene & cement in the ratio of 1:0.1 @0.50kg/sqm on the whole surface, including all labour charges tools and equipments, all complete as per the specification. page no 89 item no 10.5.1	Sqm	387.05	568.08	150109.76	387.05	595.92	185936.44	340.76	340.76	595.92	203065.70				203065.70	14829.26		Item operated
48	50	KSRB 9-27.1 : Fixing of door frames in an existing opening including embedding frame in floor and walls after cutting masonary for holdfasts for embedding holdfast in cement concrete 1:3:6 of 20mm and downsize granite metal painting two coats of coal tar to sides of frame,making good the damages to walls and floor as required and disposal of the debries with lead upto 50 m, including cost of materials, labour, complete as per specifications. Pg No 60,Item No9.80	Nos	7.00	1475.28	10326.96	7.00	1547.57	10832.99	3.00	3.00	1547.57	4642.71				4642.71		6190.28	Item operated
49	51	KSRB 9-27.1 : Fixing of door frames in an existing opening including embedding frame in floor and walls after cutting masonary for holdfasts for embedding holdfast in cement concrete 1:3:6 of 20mm and downsize granite metal painting two coats of coal tar to sides of frame,making good the damages to walls and floor as required and disposal of the debries with lead upto 50 m, including cost of materials, labour, complete as per specifications. Pg No 60,Item No9.80	Nos	3.00	1479.28	4437.84	3.00	1551.76	4655.28	5.00	3.75	1551.76	5819.10	1.25	1552.10	1940.00	7759.10	3103.82		Item operated

50	52	KSRB 9.4-2: Providing Hemne wood frames of doors, windows, clerestory windows,ventilators and other frames , wrought, framed or assembled including making plaster groves (excluding cost of cement concrete and sole clamps),but including cost of materials, labour, HOM of machineries complete as per specifications. Specification No. KBS 9.33 Pg No 53,Item No9.11	Cum	0.54	94612.30	7974.33	0.84	99248.32	83368.59	0.39	0.39	99248.32	38587.75				38587.75		44780.84	Item operated
51	53	KSRB 9.4-2: Providing Hemne wood frames of doors, windows, clerestory windows,ventilators and other frames , wrought, framed or assembled including making plaster groves (excluding cost of cement concrete and sole clamps),but including cost of materials, labour, HOM of machineries complete as per specifications. Specification No. KBS 9.33 Pg No 53,Item No9.11	Cum	0.37	94612.30	35006.55	0.37	99248.32	36721.88	0.65	0.46	99248.32	45902.35	0.19	99252.86	18481.00	64383.35	27591.47		Item operated
52	54	Providing and fixing 65mmx90mm GRP Doorframe fabricated using E-Glass Chopped Strand Mat (CSM), U.V. stabilized Isophalic Gelcoat and Isophalic resin. The thickness of the GRP skin shall not be less than 2.0 mm. The doorframe consists of four segments, which are provided with plug-in-socket arrangement in-situ in the mould. The segments are plugged in and are joined together by means of screws. The GRP frame shall be provided with wooden reinforcement of 6 locations fro high screw holding capacity for fixing metallic hold fast and shall be consolidated by filling with medium density foam/Plaster with fibre reinforcement. Six Numbers of 260mmx25mmx5mm size S shaped M.S. flat hold fast shall be provided with the frame. Page No.63, Item No. 9.95	Mtr	11.40	486.00	5540.40	11.40	509.81	5811.53	11.40	11.40	509.81	5811.53				5811.53			Item operated
53	55	KSRB 9.5-2 : Providing and fixing in position fully panelled Hemne wood shutters for doors, styles and rails of 40mm. thick with bottom and lock rails 180mm wide top rail and styles 100mm wide as per drawing and panels of 25mm thick including cost of materials, labour, HOM of machineries complete as per specifications. (excluding cost of fixtures) Specification No. KBS 9.34, Pg No. 53, Item No. 9.15	Sqm	16.38	5099.76	83534.07	16.38	5349.65	87627.27	6.30	6.30	5349.65	33702.80				33702.80		53924.47	Item operated
54	56	KSRB 9.5-2 : Providing and fixing in position fully panelled Hemne wood shutters for doors, styles and rails of 40mm. thick with bottom and lock rails 180mm wide top rail and styles 100mm wide as per drawing and panels of 25mm thick including cost of materials, labour, HOM of machineries complete as per specifications. (excluding cost of fixtures) Specification No. KBS 9.34, Pg No. 53, Item No. 9.15	Sqm	7.56	5104.10	38587.00	7.56	5354.18	40477.60	10.50	9.45	5354.18	50597.00	1.05	5354.18	5622.00	56219.00	15741.40		Item operated

55	57	Providing and fixing factory made single leaf rigid GRP Sandwich composite door shutter of 40 mm thick, laminated with two GRP skins with wood grain finish, fabricated using U.V-stabilized Isopthalic Gelcoat and one layer of 450 gm E-Glass Chopped Strand Mat (CSM), impregnated with orthopthalic polyester resin. The thickness of the skins shall not be less than 1.5mm.Expanded Polystyrene (EPS) structural foam panel of 37mm thickness and a density of 20 Kg/m3 shall be used as core material. Wooden reinforcements made of Seasoned Salwood block of cross section not lessthan 36mmx32mmand also necessary salwood reinforcements for fixing the metal fittings such as tower bolts, aldrops, handles, etc. shall be provided. A structural adhesive compatible with EPS foam shall be used for bonding the core material, the salwood reinforcement and the skins. The material and process for manufacturing the door shutters shall confirm to RV- TIFAC Composites Design Centre Standards and specifications and the door shutters tested in conformation to IS 4020-1994. The finish of shutter will be plain colour White/IVORY/Beige/Light Grey or any other colour using high quality pigments. Including cost of fixtures and inclusive of supply of shutters to respective work spot. P.No.60, I.No.9.94	Sqm	3.15	4104.00	12927.60	3.15	4305.10	13561.07	2.93	2.93	4305.10	12592.00				12592.00		969.07	Item operated
56	58	Providing and applying painting two coats (excluding priming coat) on new wood surface and / or wood based surface with enamel paint to give an even shade, cleaning the surface of all dirt, dust and foreign matter, sand papering including cost ofmaterials, labour, complete as per specifications, Pg no:121,Item no:15.60.1	Sqm	23.94	104.76	2507.95	23.94	109.89	2630.77	28.35	28.35	109.88	3115.00				3115.00	484.23		Item operated
59	60	Providing and fixing MS grill work for windows and ventilators weighing 28 kgs./ sqm. using MS flats or MS square bars or combination of MS flats and square bars as per approved design, drawing including cutting steel sections and welding the same to required pattern with a coat red lead primer & two coats synthetic enamel paint, cost of materials, fixtures, labour and HOM of machinery complete as per technical specification and as directed by the Engineer-in-Charge of work.with all lead & lift, loading & unloading and all other incidental charges etc.(BCSR Item No 7.9,Page No. 34)	Kg.s	650.40	102.60	66959.04	650.40	107.63	77231.45	378.00	378.00	107.55	40646.00				40646.00		32555.45	Item operated
60	61	Providing and fixing MS grill work for windows and ventilators weighing 28 kgs./ sqm. using MS flats or MS square bars or combination of MS flats and square bars as per approved design, drawing including cutting steel sections and welding the same to required pattern with a coat red lead primer & two coats synthetic enamel paint, cost of materials, fixtures, labour and HOM of machinery complete as per technical specification and as directed by the Engineer-in-Charge of work.with all lead & lift, loading & unloading and all other incidental charges etc.(BCSR Item No 7.9,Page No. 34)	Kg.s	350.75	109.08	36078.21	350.75	114.42	37544.42	378.00	378.00	114.42	43250.76				43250.76	5406.35		Item operated
61	62	KSRB 15-15.2 : Providing and applying enamel metal paint two coats (excluding priming coat) over new steel or other metal surface brushing to give an even shade after cleaning oil, grease, dirt and other foreign matter, including cost of materials, labour, complete as per specifications. Pg no:123,Item no:15.74	Sqm	95.40	102.60	9788.04	95.40	107.63	10267.90	143.23	119.25	107.63	12835.00	26.95	107.63	3189.00	15954.00	5686.19		Item operated
62	64	KSRB M300-Construction of Embankment with Material Gravel/Murrum KSRB M300-53. Construction of embankment with approved material Gravel /Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications, including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density. MORTH Specification No. 305. (P.No.147, I.No.19.60 of PW, PAFWTD SR 2015-19)	cum	30.04	351.00	10544.04	30.04	368.20	11060.73	55.77	37.55	368.20	13826.00	18.22	368.20	6708.00	20534.00	9473.27		Item operated

63	65	PROVIDING TRAPEZOIDAL PROFIELD SHEET Providing and installing of pre painted Galvalume iron trapezoidal profiled sheet of approved make 1060mm width (1000mm cover width),28-30 mm crest height with crest distance of 200mm c/c with 2 ribs at the centre for stiffening.The Total Coated Thickness (TCT) of the Sheet will be 0.47mm +/- 0.02 mm tolerance Zinc-Alu Alloy Coating AZ 150 gsm as per ASTM 1397a755-550 mpa steel grade,5-7 microns epoxy primer on both side of the sheet and polyster top coat 20-22 microns using self drilling /Self tapping screws of 25mm lenth ,to be fixed over the existing purlins ,rafters,channels and trusses.	Sqm	99.36	743.04	73828.45	99.36	779.45	77446.15	99.36	99.36	779.45	77446.00				77446.00		0.15	Item operated
64	66	Fabricating,supplying and erecting, M.S.Tubular Trusses for all spans as per approved drawing and designs with prefabricated steel applications using quality materials and are durable ,reliable and corrosion and abrasion resistant.Welding shall confirm,to latest structural welding code.Quality shall be on various parameters like shape,size,design gauge and polish.The entire trusses is anchored in RCC columns by using 4 nos of MS Pipes and welding wherever necessary and appying one coat of redoxide primer coat to all members of including cost of all materials,labourcharges,and hire charges of machineries for cutting,welding,grinding and erection equipments,with all lead and lift transportation,etc,complete as per specifications.	Kg.s	3206.56	119.55	354435.35	3206.56	125.75	403262.65	3207.00	3207.00	125.75	403250.00				403250.00	17.35		Item operated
65	67	Point wiring using copper wire without switch Supplying and wiring adopting loop system in existing PVC Conduit /casing capping using 2x1.55qmm (Phase & Neutral) & 1x1.0 sqmm (Earth wire) FRLS multi strand PVC insulated copper wire (confirming to IS-694: and latest amendments) with a 6Amps flush type SP control switch shall be fixed on the existing plastic sheet/ gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block, complete for each outlet.Short Point Up to 3m.(Page No 5/Item No 2.1.1)	Point	8.00	200.00	1600.00	8.00	209.50	1676.40	10.00	10.00	255.45	2554.50				2554.50	1205.40		Item operated
66	68	Point wiring using copper wire without switch Supplying and wiring adopting loop system in existing PVC Conduit /casing capping using 2x1.55qmm (Phase & Neutral) & 1x1.0 sqmm (Earth wire) FRLS multi strand PVC insulated copper wire (confirming to IS-694: and latest amendments) with a 6Amps flush type SP control switch shall be fixed on the existing plastic sheet/ gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block, complete for each outlet.Medium Point Above 3m 6m. (Page No 5/Item No 2.1.2)	Point	8.00	275.00	2200.00	8.00	255.45	2307.54	10.00	10.00	255.45	2554.50				2554.50	576.96		Item operated
67	69	Concealed Conduit System - Supplying heavy gauge PVC conduit pipe ____mm dia ____mm thick confirming to IS 2509 with suitable size bends, metal/PVC junction boxes, adhesive paste etc., and running before concreting the slab. The conduit should be tied to the reinforcement rods by using binding wires and unused ways of unction boxes and pipe ends should be covered using PVC end enclosures, run with 18SWG GI fish wire wherever necessary.25mm Dia,2mm Thick. (Page No 2/Item No 1.2.2)	Rmtr	45.00	53.00	2385.00	45.00	55.60	2502.00	55.00	55.00	55.60	3058.00				3058.00	556.00		Item operated

68	70	Groove cutting : Supplying heavy gauge conduit PVC 25/20mm of s thick heavy with suitable size bend , metal junction boxes, adhesive pastes etc, by groove cutting in a wall and fixing by brazing U or J hooks and cement plastering up to the surface and run with 18SWG GI fish wire run throughout the conduit where ever necessary.19/20mm Dia,2mm Thick. (Page No 2/Item No 1.3.1)	Rmtr	10.00	51.00	510.00	10.00	53.50	535.00	12.00	12.00	53.50	642.00				642.00	107.00		Item operated
69	71	Groove cutting : Supplying heavy gauge conduit PVC 25/20mm of s thick heavy with suitable size bend , metal junction boxes, adhesive pastes etc, by groove cutting in a wall and fixing by brazing U or J hooks and cement plastering up to the surface and run with 18SWG GI fish wire run throughout the conduit where ever necessary.25/mm Dia,2mm Thick. (Page No 2/Item No 1.3.2)	Rmtr	10.00	54.00	540.00	10.00	56.65	566.50	12.00	12.00	56.65	679.80				679.80	113.30		Item operated
70	72	Supplying and flush mounting powder coated / galvanized metal box suitable for mounting modular switch plates. The box should be firmly flush mounted after due groove cutting in Brick/Stone/C.C wall 1-3 way (Page No 9/Item No 3.4.1)	Each	8.00	95.00	760.00	8.00	99.66	797.28	10.00	10.00	99.66	996.60				996.60	199.32		Item operated
71	73	Supplying and flush mounting powder coated / galvanized metal box suitable for mounting modular switch plates. The box should be firmly flush mounted after due groove cutting in Brick/Stone/C.C wall 4-5 way (Page No 9/Item No 3.4.2)	Each	8.00	105.00	840.00	8.00	110.15	881.20	10.00	10.00	110.15	1101.50				1101.50	220.30		Item operated
72	74	Supplying 6A flush type socket and 6 amp flush type SP switch either surface/flush mounted on existing gang box or in 4mm thik plastic sheet and fixing over a flush mounted wooden box and wiring using necessary capacity wire as required as per IS 1293 and IS 3854. 6AMP 3/5 and Switch.(Page No 9/Item No 3.1.2)	No	10.00	132.00	1320.00	10.00	138.47	1384.70	12.00	12.00	138.47	1661.64				1661.64	276.94		Item operated
73	75	Supplying and mounting 2 Nos, of 2 Way 6amps flush type switches either surface/flush mounted on existing gang box or in 4mm thick plastic sheet and mounted on a flush mounted wooden box and wiring as per IS 1293. (Page No 9/Item No 3.2)	Each	10.00	150.00	1500.00	10.00	157.35	1573.50	12.00	12.00	157.35	1888.20				1888.20	314.70		Item operated
74	76	Supply and fixing of bakelite D.P /socket/switch with/ without neon indicator over existing wood board or flush mounting in plastic plates/switches as per IS 1293 and IS 3854,16Amps Combined Switch and socket with indication.(Page No 15/Item No 3.3.4)	No	10.00	194.00	1940.00	10.00	203.51	2035.10	12.00	12.00	203.51	2442.12				2442.12	407.02		Item operated
75	77	Supply and fixing of bakelite D.P /socket/switch with/ without neon indicator over existing wood board or flush mounting in plastic plates/switches as per IS 1293 and IS 3854,16Amps Combined Switch and socket with indication.(Page No 15/Item No 3.3.4)	No	10.00	150.00	1500.00	10.00	157.35	1573.50	12.00	12.00	157.35	1888.20				1888.20	314.70		Item operated
76	78	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand copper wire with lowconductor resistance single core in open or concealedsystem of wiring with specified IS-694 conforming to latestamendments.1.5sqmm (Page No 6/Item No 2.3.2)	Rmtr	45.00	20.05	902.25	45.00	21.03	946.35	55.00	55.00	21.03	1156.65				1156.65	210.30		Item operated
77	79	Wiring for lighting / power circuit using one of FRLS PVCinsulated 1100V grade, multistrand copper wire with lowconductor resistance single core in open or concealedsystem of wiring with specified IS-694 conforming to latest amendments.2.5sqmm (Page No 6/Item No 2.3.3)	Rmtr	8.00	32.00	256.00	8.09	33.57	268.56	10.00	10.00	33.57	335.70				335.70	67.14		Item operated

78	80	Wiring for lighting / power circuit using one of FRLS PVCinsulated 1100V grade, multistrand copper wire with lowconductor resistance single core in open or concealedsystem of wiring with specified IS-694conforming to latest amendments:2.5sqmm (Page No 6/Item No 2.3.3)Supplying and fixing Metal Fan Box with Round Hook(Page No 3/Item No 1.1.2)	Each	8.00	85.00	680.00	8.00	89.17	713.36	10.00	10.00	89.17	891.70				891.70	178.34		Item operated
79	81	Supplying and fixing of slim box Fitting ,made out of CRCA sheet metal body with locking type holder completely wired Excluding Ballast &Flouresent Tube, 1X4' Tube light Fitting(Page No 69/Item No 12.4.2)	Nos	12.00	300.00	3600.00	12.00	314.70	3776.40	9.00	9.00	314.70	2832.30				2832.30		944.10	Item operated
80	82	Supplying capacitor type ceiling fan complete with down rod blades shackle, canopies etc, for operation on 230 volts, 50 cycles, single phase AC supply conforming to IS5-374-1979 and with double ball bearing system 48" sweep (1200mm)(Page No 46/Item No 7.3.1)	Each	12.00	2090.00		12.00	2192.41	26305.92	9.00	9.00	2192.41	19731.69				19731.69		6577.23	Item operated
		Grand Total RS				8017542.17			8581665.96								8403607.59	896615.84	1074674.21	

Percentage of excess comparing to the sanctioned Estimated cost = $\frac{896615.84}{8581665.96} \times 100 = 10.45$

Agency Signature

Assistant Engineer
Ward No-04

Assistant Executive Engineer
Yelahanka Satellite Town Sub Division

Executive Engineer
Yelahanka Division

ಶ್ರೀರಂಗಯ್ಯ
ಮುಖ್ಯ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ